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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,659	10/21/2005	Jun Matsukawa	A3-072 US	1655

7590 05/05/2006
Stacey E Caldwell
Molex Incorporated
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Lisle, IL 60532

EXAMINER

CHAMBERS, TRAVIS SLOAN

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/529,659	MATSUKAWA ET AL.	
	Examiner	Art Unit	
	Travis Chambers	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected to under 35 U.S.C. 102(b) as being anticipated by Chang, et al. (US 6,394,843).

In reference to claim 1, Chang, et al. teaches of a memory card connector having an interior cavity (card receiving cavity 29, Fig. 3) for receiving a memory card, an insulating housing (insulating frame 20, Fig. 10) having rear terminal mounting section (transverse bar 21, Fig. 1) at the rear of the cavity, at least one longitudinal side wall section (perpendicular arms 22 and 23, Fig. 1) extending forwardly from one end of the rear section at one side of the cavity, the longitudinal side wall section including a distal end, the housing having a bottom surface (bottom metal shell 30, Fig. 1) for mounting on a circuit board and a longitudinal side wall section having a top surface, a plurality of terminals mounted on the rear terminal-mounting section of the housing having contact portions (terminals 40, Fig. 1) for engaging contacts on the memory card, a metal shell (top metal shell 10, Fig. 1) covering substantially the entire area defined by the insulating housing and including a cover plate overlying at least a

portion of the longitudinal side wall section of the housing, an engaging structure including an engaging projection (locking member 27, Fig. 1) on the top surface of said side wall section of the housing extending into an engaging opening (locking holes 17, Fig. 1) in the cover plate of the metal shell to prevent relative movement there between in a plane generally parallel to the cover plate and top surface, wherein there being clearance between the engaging projection and the engaging opening to avoid creating residual stress in the housing.

The engaging projection may be considered to be on a top surface of said side wall as that surface may be considered to be in a top direction as direction is relative to one's reference point.

In reference to claim 2, Chang, et al. teaches the terminal mounting section (transverse bar 21, Fig. 1) extending transversely across the rear of the cavity (card receiving space 29, Fig. 1), the engaging projection (locking elements 37, Fig. 1) being near the distal end of the side wall section and projecting from the top surface thereof for engagement in an engaging opening in the cover plate of the metal shell.

Although Matsukawa teaches of an L-shaped insulating housing Chang, et al. teaches of an insulating frame having two perpendicular arms. However, this arrangement may be considered generally L-shaped, as required by the claim.

In reference to claim 3, Chang, et al. teaches the insulating housing (insulating frame 20, Fig. 10) is generally U-shaped with the terminal-mounting section (transverse bar 21, Fig. 1) extending transversely across the rear of the

cavity and including two of the longitudinal side wall sections (perpendicular arms 22 and 23, Fig. 1) extending from both opposite ends of the rear section and including one of the engaging projections (locking arms 37, Fig. 1) near the distal end of each side wall section and projecting from the top surface thereof into a respective engaging opening (locking holes 17, Fig. 1) in the cover plate of the metal shell.

In reference to claim 4, Chang, et al. teaches of the metal securing nail (solder ends 25, Fig. 1) fixed to the insulating housing (insulating frame 20, Fig. 1) and having a foot portion for securing to an appropriate mounting pad on the circuit board.

In reference to claim 5, Chang, et al. teaches metal securing nail (solder ends 25, Fig. 1) is fixed to the housing adjacent to the engaging structure (locking member 27, Fig. 1).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang, et al. (US 6,394,843) in view of Nogami (US 6,394,827).

Chang et al. teaches the use of a metal shell formed into engagement with metal securing nail.

However Chang, et al. does not teach of the metal shell including a grounding tab.

Nogami teaches the metal shell (case cover 5, Fig. 1) including the grounding tab (fixing leg 73, Fig. 1 and Col. 5, line(s) 33-37).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of Nogami to improve the invention of Chang, et al.

One skilled in the art would have been motivated to use the teachings of Nogami because, as taught by Nogami (fixing leg 73, Fig. 1 and Col. 5, line(s) 33-37), it will help prevent electrical damage to the device.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis Chambers whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2833

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC



5/1/08

PHUONG T. VU
PRIMARY EXAMINER